

FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST6219

TRUE WORLD FOODS INTERNATIONAL DBA SHINING OCEAN

January 2009

PURPOSE of this Fact Sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge permit for True World Foods International doing business as (dba) Shining Ocean (Shining Ocean) that will allow the discharge of wastewater to the city of Sumner publicly owned treatment works (POTW).

State law requires any industrial facility to obtain a permit before discharging waste or chemicals to waters of the state. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into waters of the state.

A State Waste Discharge permit limits the types and amounts of pollution the facility may discharge. Ecology bases those limits either on (1) the pollution control or wastewater treatment technology available to the industry, or on (2) the effects of the pollutants to the POTW (local limits).

PUBLIC ROLE in the Permit

Ecology makes the draft permit and fact sheet available for public review and comment at least 30 days before we issue the final permit to the facility operator. Copies of the fact sheet and draft permit for Shining Ocean, State Waste Discharge permit ST 6219, are available for public review and comment from December 18, 2008, until the close of business January 16, 2009. For more details on preparing and filing comments about these documents, please see **Appendix A - Public Involvement**.

Before Ecology published the draft State Waste Discharge permit, Shining Ocean, reviewed it for factual accuracy. Ecology corrected any errors or omissions about the facility's location, product type or production rate, discharges or receiving water, or its history.

After the public comment period closes, Ecology will summarize substantive comments and our responses to them. Ecology will include our summary and responses to comments to this Fact Sheet as **Appendix C - Response to Comments**, and publish it when we issue the final State Waste Discharge permit. The rest of the fact sheet will not be revised, but the full document will become part of the legal history contained in the facility's permit file.

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I. INTRODUCTION

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State Waste Discharge Program (Chapter 173-216 Washington Administrative Code [WAC])
- Submission of Plans and Reports for Construction of Wastewater Facilities (Chapter 173-240 WAC)

These rules require any industrial facility operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

Under the State Waste Discharge permit program and in response to a complete and accepted permit application Ecology must prepare a draft permit and accompanying fact sheet, and make it available for public review before final issuance. Ecology must also publish an announcement (public notice) telling people where they can read the draft permit, and where to send their comments, during a period of thirty days. (See **Appendix A--Public Involvement** for more detail about the Public Notice and Comment procedures). After the Public Comment Period ends, Ecology may make changes to the draft State Waste Discharge permit in response to comment. Ecology will summarize the responses to comments and any changes to the permit in **Appendix D**.

Table 1 - General Facility Information

Applicant:	True World Foods International dba Shining Ocean
Facility Name and Address:	Shining Ocean 1515 Puyallup Street Sumner, WA 98390
Type of Facility:	Food Processing
SIC Code	2092
Discharge Location:	Latitude: 47° 12' 47.05" N Longitude: 122° 14' 9.38" W
Treatment Plant Receiving Discharge	City of Sumner POTW
Contact at Facility	Name: Mr. Michael Fisher, Facility Manager Telephone No: 253-826-3700
Responsible Official	Name: Mr. Robert Bleu Title: President Address: 1515 Puyallup Street Telephone No. 253-826-3700.265 FAX No. 253-826-2634

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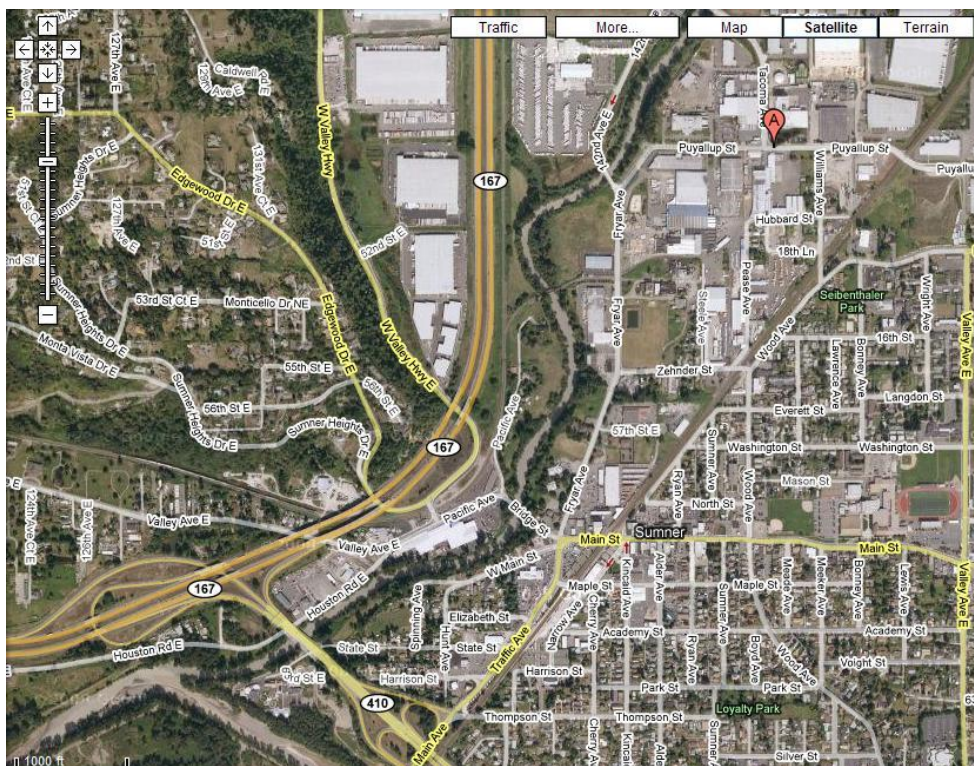


Figure 1. Vicinity Map



Figure 2. Facility Location Map

II. BACKGROUND INFORMATION

A. Facility Description

History

True World Foods International founded Shining Ocean in 1985 in Seattle, Washington. They created the Kanimi brand and quickly helped to usher in two decades of explosive growth in the surimi seafood industry. Eventually they outgrew the original Seattle facility. In 2003, Shining Ocean moved their facility to Sumner, Washington.

Shining Ocean is one of the early pioneers of the American surimi seafood industry. Surimi-based products like kamaboko and fish sausages have been staples of the Japanese diet for many centuries. Starting in the mid-1980s surimi became a popular part of the American food industry with the development of a new type of product that resembles the taste and texture of shellfish.

The Sumner, Washington facility was originally built as a cheese plant in the dairy industry in 1989. The 95,000 sq. ft. state of the art processing facility was named the new plant of the year in March, 1990 by Food Engineering and was a model site by Butler Builders. Shining Ocean currently employs approximately 110 people.

Shining Ocean applied for a State Waste Discharge Permit for a discharge to a publicly owned treatment works (POTW), as evident in a copy of an original permit application signed by Mr. Kenji Nishioka on September 4, 2003. Ecology cannot find a record of this permit application in its files and Ecology has not issued a discharge permit to Shining Ocean. Shining Ocean maintains that they submitted the permit application to Ecology in 2003, as required.

In order to address this situation, Ecology requested Shining Ocean to provide a new permit application filled out with current information. Shining Ocean submitted an application for a State Waste Discharge permit to Ecology on September 2, 2008. Ecology accepted it as complete on September 17, 2008.

This permit covers an existing, unpermitted facility which has operated for the last five years. During this time, the facility has discharged industrial process wastewater to the city of Sumner POTW. The city of Sumner has been working with Shining Ocean to ensure that there are controls/agreements in place such that Shining Ocean's discharge will not impact Sumner's POTW operations.

Industrial Process

Shining Ocean receives fish, seasonings, cooking oil, and packaging as raw materials. They produce and distribute fish protein sticks to their customers after they pasteurize, freeze and/or cook the raw materials.

Several different surimi products are produced for both commercial and household customers. These products include: Crab Smart Natural, Crab Smart, Shrimp Combo, Crab & Lobster Elite, Kamini Deluxe, Kamini, Emerald Sea, Seafarer, Sushi Supreme, and various specialty items.

The facility has averaged approximately 11,713,000 pounds of fish product in the last five years. They have no plans to increase production at the facility in the next five years.

The plant is open five days a week, 18-hours per day. No seasonal variation in production was noted in their permit application.

The plant uses an average of 40,000 gallons per day (gpd) and a maximum of 45,000 gpd from the Sumner Water District.

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They generate process wastewater from the following processes: mixing, cooking, packaging, pasteurizing, and quick freezing.

The plant uses sodium hydroxide for pH neutralization as part of their wastewater pre-treatment system. The facility also uses and stores the following chemicals:

Table 2. List of Chemicals and Amounts Stored On-Site.

Type of Chemical	Amount Stored
Non-chlorinated alkaline cleaner (Chemstation Product 1557)	40-80 gallons
Caustic Cleaner (Smoke-Away 25%)	10 gallons
Acid Quaternary Ammonia Sanitizer (Supersan)	5-15 gallons
Phosphoric Acid Solution (30%)	4 gallons
CH20 6262 Sodium Sulfite (20%)	10-25 gallons
CH20 6322 Phosphonic Acid (<5%), NaOH (<5%)	10-50 gallons
CH20 Unibrom NA Bromide (10%)	25 gallons
CH20 Bitrol 20 2-Butoxylene	10-25 gallons

Wastewater Pre-Treatment System

The facility collects wastes in an underground storage tank. They neutralize the waste for pH (if necessary) by using sodium hydroxide (approximately 3 gallons per day). Then, the waste is pumped through a 400-micron filter to two settling tanks. From these tanks, the waste is pumped through 300-micron filters to an additional settling tank. The facility pumps waste from this tank to a final settling tank where it removes the sludge from the bottom of the cone-shaped tank for disposal by a contractor. The treated decant is pumped to the city of Sumner POTW. Figures 3 and 4 provide schematic diagrams of the pre-treatment system.

The pre-treatment system is internally designed to handle 45,000-gallons per day. The system discharges an average of 40,000 gallons per day. There are no design criteria regarding pollutant removal or concentration values.

Figure 3. Shining Ocean Wastewater Pre-Treatment System Schematic Diagram.



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SCHEMATIC DIAGRAM FOR SECTION C.2

ALL WATER USED IS FROM MUNICIPAL SUPPLY: 40,000 GAL/DAY AVERAGE.

ALL WATER FROM PROCESSING AREA OF THE PLANT GOES TO WATER TREATMENT SYSTEM AND THEN TO SANITARY SEWER SYSTEM: SEE FACILITY SITE MAP B.2. THERE IS ONLY ONE WASTE STREAM

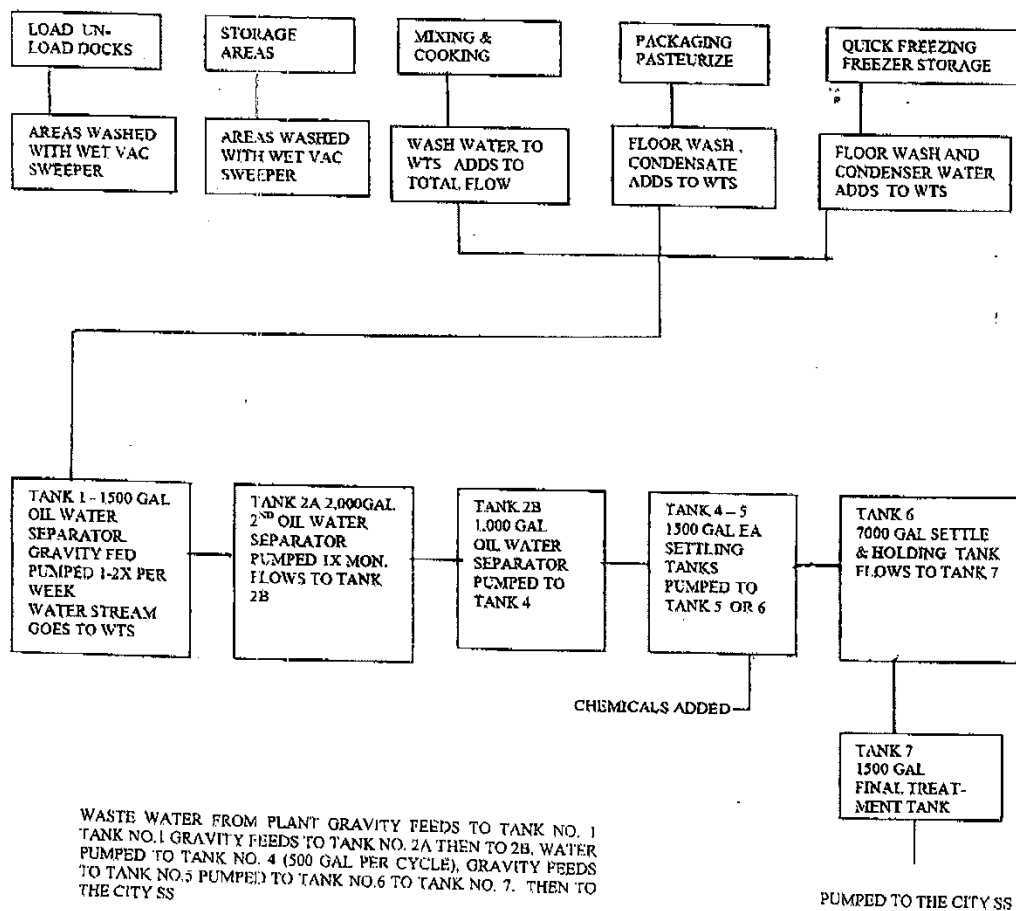


Figure 4. Shining Ocean Wastewater Pre-Treatment System Simplified Schematic Diagram.

Solid Wastes

Plant staff dispose of sludge from the settling tanks in the wastewater pre-treatment system and food processing and food products spilled on the floor in a dumpster. The solid waste is currently disposed of by AAA Speed Septic Services (9216 159th Street Court E, Puyallup, Washington 98375, 253-864-9764).

The facility has not yet submitted a Solid Waste Control Plan to Ecology. The proposed State Waste Discharge Permit requires Shining Ocean to submit a Solid Waste Control Plan.

B. Permit Status

This is a new, previously unpermitted facility discharging industrial process wastewater to the City of Sumner's sanitary sewer system.

Shining Ocean submitted an application for a State Waste Discharge permit to Ecology on September 2, 2008. Ecology accepted it as complete on September 17, 2008.

Shining Ocean currently has an active Industrial Stormwater General Permit (SO3002914) which covers their stormwater discharge from the site.

C. Wastewater Characterization

Shining Ocean reported the concentration of pollutants in their State Waste Discharge application. The effluent is characterized as follows:

Table 3. Wastewater Characterization

Parameter	Average Concentration	Maximum Concentration
BOD ₅ , mg/L	442	700
COD, mg/L	712	800
TSS, mg/L	170	125
Copper, µg/L	-	58 ¹
Lead, µg/L	-	<1 ¹
Zinc, µg/L	-	150 ¹
Mercury, µg/L	-	<0.2 ¹
pH, standard units (s.u.)	minimum 5.25; maximum 7.16	
¹ Metals data are based on only one sample collected on 5/16/2008.		

D. SEPA Compliance

Regulation exempts reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions are no less stringent than state rules and regulations. The exemption applies only to existing discharges, not to new discharges.

III. PROPOSED PERMIT CONDITIONS

State regulations require that Ecology base permit discharge limits on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation, or Ecology develops limits on a case-by-case basis (40 Code of Federal Regulations [CFR] 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).
- Effects of the pollutants to the POTW (local limits). Wastewater must not interfere with the operation of the POTW.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

The limits in this permit reflect information received in the application and from supporting reports (engineering, hydrogeology, monitoring, etc.). Ecology evaluated the permit application and determined the limits needed to comply with the rules adopted by the State of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in regulation.

Ecology does not usually develop permit limits for pollutants that were not reported in the permit application but that may be present in the discharge. The permit does not authorize the discharge of the non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Industries may be in violation of their permit until the permit is modified to reflect additional discharge of pollutants.

A. Technology-Based Effluent Limits

There are no specific pre-treatment categorical limitation standards defined for this type of facility. The closest categorical limit for this type of industry would be found in Title 40 CFR Part 408 – Canned and Preserved Seafood Processing Point Source Category. 40 CFR Part 408 only specifies limits for catfish, blue crab, crab meat, whole crab, Dungeness and Tanner crab, shrimp, tuna, fish meal, salmon, bottom fish, clam, oyster, sardine, scallop, herring, and abalone processing. Shining Ocean uses a variety of seafood as ingredients for their surimi product. Major ingredients include: Alaskan polluck, and Pacific Northwest Whiting. Minor ingredients include: cold-water shrimp, New England lobster, and Snow Crab.

None of the major ingredients (polluck and whiting) used at Shining Ocean are listed in 40 CFR Part 408. However, a review of the listed pre-treatment requirements in the categorical standards shows that some form of pre-treatment is required for: oil and grease, TSS, and pH (for some types of processing). Categorical limits do not provide specific limits other than requiring pre-treatment.

Shining Ocean currently uses a pre-treatment system which provides pH neutralization, solids separation, and filtration. At this time, Shining Ocean has not submitted an Engineering Report for this system and Ecology is not certain if an Engineering Report for the pre-treatment system exists. The facility has not provided treatment system design criteria. The proposed permit requires Shining Ocean to submit an Engineering Report and Plans and Specifications providing a detailed description of its pre-treatment system—design criteria, equipment specifications, tank capacities, pre-treatment requirements to meet

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permit limits, and any necessary upgrades and/or modifications. This would enable Ecology to determine whether or not this facility meets AKART.

Ecology based effluent limits for the proposed permit on the requirements established by the Sumner POTW. Ecology believes Sumner's POTW pre-treatment requirements will adequately ensure that Shining Ocean will meet AKART. The proposed permit also requires the facility to collect ammonia data such that Ecology can assess whether or not ammonia will impact Sumner's POTW.

B. Effluent Limits Based On Local Limits

To protect city of Sumner's POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, Ecology believes it necessary to impose limits for certain parameters. Ecology based these limits on local limits established by the city of Sumner through their discharge agreement with Shining Ocean and codified in ordinance. Applicable limits for this discharge include the following:

Table 4. Limits Based on Local Limits.

EFFLUENT LIMITS			
Parameter	Minimum Daily	Average Monthly	Maximum Daily
Flow, gpd	-	45,000	56,000
BOD ₅ , lbs/day	-	135	169
TSS, lbs/day	-	45	56
Dissolved Oxygen, mg/L	1.0	-	-
Temperature, °F	-	-	100
Oil, and Grease, mg/L	-	-	50
pH, standard units (s.u.)	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0.		

IV. MONITORING REQUIREMENTS

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the pre-treatment process functions correctly and that the discharge complies with the permit's effluent limits.

Monitoring is required for Outfall 001 for flow, BOD, TSS, ammonia, oil and grease, dissolved oxygen, temperature, and pH. Monitoring and reporting is required on a monthly basis. This permit requires monitoring for ammonia to further characterize the facility's effluent. Ammonia could have an impact on the receiving POTW if discharged in large amounts.

Ecology details the proposed monitoring schedule under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

Shining Ocean also conducts monitoring to comply with requirements under their discharge agreement with Sumner POTW. If the monitoring requirements under the Sumner POTW discharge agreement coincide with the monitoring requirements in this permit, then the monitoring events may be combined into a single event.

A. Lab Accreditation

Ecology requires that facilities must use a laboratory registered or accredited under the provisions of chapter 173-50 WAC, *Accreditation of Environmental Laboratories* to prepare all monitoring data (with the exception of certain parameters).

V. OTHER PERMIT CONDITIONS

A. Reporting and Recordkeeping

Ecology based permit condition S3 on our authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and CFR 403.12 (e),(g), and (h)).

B. Prohibited Discharges

Ecology prohibits certain pollutants from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

C. Dilution Prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

D. Engineering Report and Plans and Specifications

Shining Ocean must submit an Engineering Report and Plans and Specifications to the pre-treatment system in order to ensure that they are meeting AKART. Even though the pre-treatment system has already operated for almost ten years, it is unclear whether or not True World Foods International designed the system with any criteria or if it followed any required engineering design principles. Furthermore, Ecology believes that a licensed professional engineer should check the system to ensure that it needs no upgrades or major maintenance.

E. Solid Waste Control Plan

Shining Ocean could cause pollution of the waters of the state through inappropriate disposal of solid waste or through the release of leachate from solid waste.

This proposed permit requires this facility to develop a solid waste control plan to prevent solid waste from causing pollution of waters of the state. Shining Ocean must submit the plan to Ecology for approval (RCW 90.48.080).

F. Spill Plan

This facility stores a quantity of chemicals on-site that have the potential to cause water pollution if accidentally released. Ecology can require a facility to develop best management plans to prevent this accidental release [section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080].

The proposed permit requires this facility to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

G. Operations and Maintenance

Ecology requires industries to take all reasonable steps to properly operate and maintain their wastewater pre-treatment system in accordance with state regulations (WAC 173-240-080 and WAC 173-216-110). The facility must prepare and submit an operation and maintenance manual as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). Implementation of the procedures in the Operation and Maintenance Manual ensures the facility's compliance with the terms and limits in the permit. The proposed permit requires submission of an annual confirmation letter stating that the O&M Manual has been reviewed and updates were made, as necessary. The facility must submit any substantial updates to the O&M Manual to Ecology for review and approval.

H. Application for Permit Renewal

Shining Ocean must submit a permit renewal application no later than 18 months prior to the expiration date of the permit.

I. General Conditions

Ecology bases the standardized General Conditions on state and federal law and regulations. They are included in all State Waste Discharge permits issued by Ecology.

VI. PUBLIC NOTIFICATION OF NONCOMPLIANCE

Ecology may annually publish a list of all industrial users in significant noncompliance with Pre-treatment Standards or Requirements during any of the previous four quarters in a local newspaper. Accordingly, this permit condition informs the Facility that noncompliance with this permit may result in publication of the noncompliance.

VII. PERMIT ISSUANCE PROCEDURES

A. Permit Modifications

Ecology may modify this permit to comply with new or amended state or federal regulations.

B. Proposed Permit Issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for five years.

VIII. REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(<http://www.ecy.wa.gov/laws-rules/index.html>)

Permit and Wastewater Related Information
(<http://www.ecy.wa.gov/programs/wq/wastewater/index.html>)

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

Ecology proposes to issue a permit to True World Foods International dba Shining Ocean. The permit prescribes operating conditions and wastewater discharge limits. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology placed a Public Notice of Application on November 6, 2008, and November 13, 2008, in the *Puyallup Herald* to inform the public about the submitted application and to invite comment on the issuance of this permit.

Ecology will place a Public Notice on December 18, 2008, in the *Puyallup Herald* to inform the public and to invite comment on the proposed issuance of this State Waste Discharge permit as drafted.

The Notice –

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website.).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Asks people to tell us how well the proposed permit would protect the receiving water.
- Invites people to suggest fairer conditions, limits, and requirements for the permit.
- Invites comments on Ecology's determination of compliance with antidegradation rules.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed State Waste Discharge Permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled **Frequently Asked Questions about Effective Public Commenting** which is available on our website at <http://www.ecy.wa.gov/biblio/0307023.html>.

You may obtain further information from Ecology by telephone, 360-407-6280, or by writing to the permit writer at the address listed below.

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

The primary author of this permit and fact sheet is John Y. Diamant, P.E.

APPENDIX B--GLOSSARY

AKART — The acronym for “all known, available, and reasonable methods of prevention, control and treatment.” AKART is a technology-based approach to limiting pollutants from wastewater discharges which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Alternate Point of Compliance — An alternative location in the ground water from the point of compliance where compliance with the ground water standards is measured. It may be established in the ground water at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An “early warning value” must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Ambient Water Quality — The existing environmental condition of the water in a receiving water body.

Ammonia — Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Annual Average Design Flow (AADF) — The average of the daily flow volumes anticipated to occur over a calendar year.

Average Monthly Discharge Limit — The average of the measured values obtained over a calendar month's time.

Background water quality — The concentrations of chemical, physical, biological or radiological constituents or other characteristics in or of ground water at a particular point in time upgradient of an activity that has not been affected by that activity, [WAC 173-200-020(3)]. Background water quality for any parameter is statistically defined as the 95 percent upper tolerance interval with a 95 percent confidence based on at least eight hydraulically upgradient water quality samples. The eight samples are collected over a period of at least one year, with no more than one sample collected during any month in a single calendar year.

Best Management Practices (BMPs) — Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅ — Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass — The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards — National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling — A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling — A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite Sample — A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity — Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring — Uninterrupted, unless otherwise noted in the permit.

Distribution Uniformity — The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Early Warning Value — The concentration of a pollutant set in accordance with WAC 173-200-070 that is a percentage of an enforcement limit. It may be established in the effluent, ground water, surface water, the vadose zone or within the treatment process. This value acts as a trigger to detect and respond to increasing contaminant concentrations prior to the degradation of a beneficial use.

Enforcement limit — The concentration assigned to a contaminant in the ground water at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a ground water criterion will not be exceeded and that background water quality will be protected.

Engineering Report — A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Ground water — Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

Grab Sample — A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User — A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater — Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference — A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits — Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limit — The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Maximum Day Design Flow (MDDF) — The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum Month Design Flow (MMDF) — The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum Week Design Flow (MWDF) — The largest volume of flow anticipated to occur during a continuous 7-day period, expressed as a daily average.

Method Detection Level (MDL) — The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

pH — The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7.0 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Pass-through — A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Peak Hour Design Flow (PHDF) — The largest volume of flow anticipated to occur during a one-hour period, expressed as a daily or hourly average.

Peak Instantaneous Design Flow (PIDF) — The maximum anticipated instantaneous flow.

Point of Compliance — The location in the ground water where the enforcement limit shall not be exceeded and a facility must be in compliance with the Ground Water Quality Standards. It is determined on a site specific basis and approved or designated by Ecology. It should be located in the ground water as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless an alternative point of compliance is approved.

Potential Significant Industrial User — A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

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- a. Exceeds 0.5 percent of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL) — A calculated value five times the MDL (method detection level).

Reasonable Potential — A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Significant Industrial User (SIU) —

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge — Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

Soil Scientist — An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3, or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

Solid waste — All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD₅ — Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD test is not specifically described in Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD₅ test is sufficient to remove the particulate organic fraction.

State Waters — Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater — That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit — A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria — A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids — That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS) — Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit — A limit on the concentration of an effluent parameter that is intended to prevent pollution of the receiving water.

APPENDIX C—RESPONSE TO COMMENTS

Ecology received comments from Shining Ocean, Inc. in a letter dated December 10, 2008. The following paragraphs, from their letter, provide their comments:

Comments:

The company has been testing the waste water through the City of Sumner since nearly the startup of the factory in 2003, during this time the requirements of the City of Sumner POTW have been met consistently with no major issues. The company has specific Flow, TSS, BOD, pH and Dissolved Oxygen requirements from the city which are monitored on a quarterly basis.

NH₃ is a new requirement that was discussed by Mr. Diamante of the Department as being listed due to issues with Nitrates and Nitrite problems with the Industrial Storm water Permit. This problem was identified to be leakage from the cooling water additive for the chilling system.

This additive has been changed and the leak has been fixed. As such, Shining Ocean requests that the requirement for the NH₃ testing to be removed.

Since there have been no significant issues with the current city requirements, and therefore there is a history of compliance, it is requested that the requirements from the State of Washington be modified to match the requirements from the City of Sumner. That is, Flow, TSS, BOD, pH, and DO to be monitored / reported quarterly.

Ecology's Response:

Ecology recognizes the differences between the City of Sumner's requirements with those contained in the proposed State Waste Discharge Permit. Ecology also recognizes that Shining Ocean has been working for several years with the City of Sumner to meet their pre-treatment program requirements. The City of Sumner has been proactive in working with industry discharging to their sanitary sewer and should be lauded for their work with Shining Ocean before a State Waste Discharge Permit was issued.

Ecology has reviewed Shining Ocean's request to eliminate ammonia monitoring and has concurred that it would not be relevant. Ecology's original intent was to assess the amount of nitrogen being discharged by the facility (not from the facility's stormwater discharge). However, a literature review was conducted and suggested that 1) ammonia was not the appropriate nitrogen species to monitor in this case, and 2) Shining Ocean's flow in combination with other similar seafood processors' nitrogen content would most likely show there is not a significant impact to the POTW. Therefore, the ammonia monitoring requirement was removed from the permit.

Shining Ocean has requested to monitor on a quarterly basis instead of a monthly basis. Ecology has reviewed this request and has determined that it is more desirable to maintain monthly monitoring at this time. The monitoring frequency may be re-evaluated during the next permit renewal if there is a good record of compliance and there does not appear to be a high fluctuation of wasteloads/pollutant concentrations being discharged to the Sumner POTW. Therefore, Ecology has not changed the frequency of monitoring for flow, TSS, BOD, pH, DO, **Oil and Grease, and Temperature** (oil and grease, and temperature were parameters left out of Shining Ocean's comments).